



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,810	09/02/2005	Franz Amtmann	AT02 0055 US	9914

65913 7590 10/16/2008  
NXP, B.V.  
NXP INTELLECTUAL PROPERTY DEPARTMENT  
M/S41-SJ  
1109 MCKAY DRIVE  
SAN JOSE, CA 95131

EXAMINER
----------

JIANG, YONG HANG

ART UNIT	PAPER NUMBER
----------	--------------

2612

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

10/16/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/525,810	<b>Applicant(s)</b> AMTMANN, FRANZ	
	<b>Examiner</b> YONG HANG JIANG	<b>Art Unit</b> 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10-14 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,10-14 and 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's response filed 7/2/2008 has been entered. Claims 1, 3-4, 7-8, 10, 14, and 16 are amended. Claims 2, 9, and 15 are cancelled. Claims 20-22 are newly added. Claims 1, 3-8, 10-14, 16-22 are pending.

### ***Response to Arguments***

2. Applicant's arguments filed 7/2/2008 have been fully considered but they are not persuasive.

Applicant argues on the last paragraph of page 8 that Vacherand teaches that either the sequence number assigned to each tag or the ID code of the corresponding tag is transmitted to the interrogator in reference to Column 3 lines 6-10. The examiner respectfully disagrees. In the cited reference, Vacherand teaches a method to minimize the time required for checking the presence of the tags by assigning to the tags a sequence number that enables presence or absence of the tag in the electromagnetic field to be checked, not sending the sequence number or the ID code.

Applicant next argues on the first paragraph of page 9 that Vacherand teaches away from the combination of Bauer and Cesar because Bauer and Cesar teach that two signals are transmitted from a tag to a base station to identify the tag. The examiner respectfully disagrees. Vacherand teaches a method to minimize the time required for checking the presence or absence of the tags. This teaching is in the field

Art Unit: 2612

of transponder communication, and it helps to detect the presence or absence of tags quickly by modifying the first signal (presence-signal) transmitted by the combination of Bauer and Cesar to be shorter to follow faster detection. Therefore, Vacherand does not teach away from the invention.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-4, 7-8, 10-11, 14, 16-17, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. (US 7,084,769), and in view of Cesar et al. (US 6,172,596) and Vacherand et al. (US 6,650,228).

Referring to claim 1, Bauer et al. disclose a method of inventory at least one transponder by means of a communication station, wherein the communication station emits an unmodulated carrier signal in a communication range and wherein the transponder on entering the communication range emits a response signal to the reader (col. 2 lines 50-60; col. 3 lines 10-20 and col. 5 lines 46-51; see Figure 1).

However, Bauer et al. did not explicitly disclose a communication method wherein the communication station emits a signal in a communications range, and wherein the transponder on entering the communications range emits a presence-signaling signal in the communications range, and wherein the communication station

Art Unit: 2612

on receiving a presence-signaling signal emits a command signal in the communications range, and wherein the transponder on receiving the command signal emits a response signal in the communications range permitting the identifying of the transponder, and wherein the communication station, on correctly receiving a response signal undertakes identifying of the transponder.

In an analogous art, Cesar et al. disclose a method of identifying at least one transponder (131,141) (i.e. tags) by means of a communication station (100) (i.e. base station), wherein the communication station (100) (i.e. base station) (i.e. step 405) emits a command signal in a communications range, and wherein the transponder (131,141) (i.e. tags) on entering the communications range emits a presence-signaling signal (i.e. step 415) in the communications range, and wherein the communication station (100) (i.e. base station) on receiving a presence-signaling signal emits a command signal (i.e. step 435) in the communications range, and wherein the transponder (131,141) (i.e. tags) on receiving the command signal emits a response signal (i.e. step 445) in the communications range permitting the identifying of the transponder(131,141) (i.e. tags), and wherein the communication station (100) (i.e. base station), on correctly receiving a response signal undertakes identifying of the transponder(131,141) (i.e. tags) (col. 5 line 53 to col. 5 line 10). Both Bauer et al. and Cesar et al. teach RFID tags system.

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to have the identifying steps of Cesar et al. into Bauer et al. system would the identification of the tag.

Bauer et al. in view of Cesar et al. did not explicitly disclose wherein the transponder emits a presence-signaling with a first signal duration and a response signal with a second signal duration, and wherein the first signal duration is shorter than the second signal duration.

In an analogous art, Vacherand et al. disclose sequence number assigned to each tag will have a bit length much shorter than the ID code length, E.g., with an 8 bit long sequence number it can be envisaged to manage simultaneously 255 tags, each having an ID code of 64 or 128 bits, for instance (col. 3 lines 11-18). Bauer-Cesar and Vacherand et al., all teach tag communication system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have different duration signals of Vacherand et al. into Bauer-Cesar with the motivation for doing so would allow simultaneously managing a large number of tags.

Referring to claim 7, independent claim 7 is directed to a communication station drafted in analogy to method claim 1. Hence, the subject-matter of the claim is not novel in view of the above-mentioned documents.

Referring to claim 8, independent claim 8 is directed to a transponder drafted in analogy to method claim 1. Hence, the subject-matter of the claim is not novel in view of the above-mentioned documents.

Referring to claim 14, independent claim 14 is directed to an integrated circuit drafted in analogy to method claim 1. Hence, the subject-matter of the claim is not novel in view of the above-mentioned documents.

Art Unit: 2612

Referring to claims 3-4, 10-11, and 16-17, since Vacherand et al. disclose sequence number assigned to each tag will have a bit length much shorter than the ID code length, E.g., with an 8 bit long sequence number it can be envisaged to manage simultaneously 255 tags, each having an ID code of 64 or 128 bits, for instance (col. 3 lines 11-18). Therefore, it is obvious to one of ordinary skill in the art at the time of the invention to have the ratio of the signal durations as claimed is desired upon designer choice.

Referring to claims 20-22, Vacherand et al. discloses the presence-signaling signal does not include an identification data ID of the transponder (via minimizing the time for checking the presence of the tags is achieved by assigning to each of the tags a sequence number **without** the use of the tag's ID code. Col. 3, lines 6-10).

5. Claims 5-6, 12-13, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al., in view of Cesar et al. and Vacherand et al., further in view of Meier (US 6,323,566).

Referring to claim 5, Bauer et al. in view of Cesar et al. and Vacherand et al. disclose the method of claim 1. However, Bauer et al. in view of Cesar et al. and Vacherand et al. did not explicitly disclose wherein the transponder emits a presence-signaling signal with a first transmission parameter and a response signal with a second transmission parameter.

In an analogous art, Meier teaches the transponder emits a presence-signaling signal with a first transmission parameter and a response signal with a second transmission parameter (col. 11 lines 33-43). Bauer and Meier teach tag

Art Unit: 2612

communication system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the first and second signals with different parameter of Meier into the combination of Bauer-Cesar-Vacherand to use a known technique to allow easy transponder to interrogator communication.

Referring to claims 12 and 18, recite the limitations of claim 5 and therefore are rejected on the same basis.

Referring to claim 6,13 and 19, Meier discloses wherein one of two different subcarrier frequencies of each subcarrier signal is used, one as first transmission parameter and one as second transmission parameter. (col. 11 lines 33-43)

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2612

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YONG HANG JIANG whose telephone number is (571)270-3024. The examiner can normally be reached on M-F 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian A. Zimmerman can be reached on 571-272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. J./

Examiner, Art Unit 2612

/Brian A Zimmerman/

Supervisory Patent Examiner, Art Unit 2612